



**Testimony of Connecticut Fund for the Environment
Before the Committee on the Environment**

In Support of
H.B. 7156, AAC THE PROCUREMENT OF ENERGY DERIVED FROM OFFSHORE WIND

In Support of
S.B. 875, AN ACT EXPANDING CONNECTICUT'S OFFSHORE WIND ENERGY POLICY

Submitted by Claire Coleman
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Connecticut Fund for the Environment (CFE) is a non-profit environmental organization with thousands of members and over 15,000 activists. The mission of CFE, and its bi-state program Save the Sound, is to protect and improve the land, air, and water of Connecticut and Long Island Sound. We use legal and scientific expertise and bring people together to achieve results that benefit our environment for current and future generations.

Dear Co-Chairs Arconti and Needleman, Vice-Chairs Fonfara and Allie-Brennan, Ranking Members Formica and Ferraro, and members of the Energy & Technology Committee:

CFE strongly supports the legislature taking action on offshore wind this legislative session, and is in support of key aspects of both House Bill 7156, An Act Concerning the Procurement of Energy Derived from Offshore Wind and Senate Bill 875, An Act Expanding Connecticut's Offshore Wind Energy Policy.

Harnessing offshore wind is a critical step to transition from polluting fossil fuels to cleaner, climate-safe energy. Continued investment in zero-carbon, renewable energy technologies like offshore wind is necessary for Connecticut to meet the science-based mandate in Public Act 18-82 to reduce economy-wide GHG-emissions 45% from 2001 levels by 2030.¹

Offshore wind is a significant clean, renewable energy source that, once built, will increase reliability of our electric grid and produce enough energy to meet winter peak demand,

¹ Governor's Council on Climate Change, *Building a Low Carbon Future for Connecticut: Achieving a 45% GHG Reduction by 2030* (released Dec. 18, 2018), at 28, available at https://www.ct.gov/deep/lib/deep/climatechange/publications/building_a_low_carbon_future_for_ct_gc3_recommendations.pdf (analysis suggest that we need to put approximately 500,000 zero emission vehicles (ZEVs) on the road by 2030 to meet these targets).

reducing the state and region's reliance on natural gas.² Offshore wind energy has the potential to provide large amounts of clean power in U.S. coastal areas where demand is high and geographic capacity for land-based renewable projects is limited.³ Wind speeds tend to be faster and more consistent offshore, thereby providing more reliable power potential and making coastal waters a more economic and efficient location for large-scale wind projects. The U.S. Department of Energy National Renewable Energy Laboratory has mapped out U.S. coastal areas with greatest offshore wind power generation potential. The federal waters off of the Atlantic coast is an ideal location for offshore wind given the strong winds and shallow ocean depths.⁴ Importantly, offshore wind development will occur in federal waters extending out approximately 200 nautical miles – far away from shorelines and the Long Island Sound.⁵ One study estimated that gradual development of offshore wind on the East Coast over the next 20 years could generate enough energy to power over 115 million households.⁶

Offshore wind is cost effective. Newer turbine technology is highly advanced, designed to increase electricity production and enhance overall turbine efficiency, drastically reducing costs of offshore wind production.⁷ Last year's 800 MW procurement in Massachusetts is expected to save Massachusetts ratepayers \$1.4 billion over the life of the contract.⁸ Rhode Island's 400 MW procurement is expected to save Rhode Island electric customers \$90 million in energy costs over the life of the contract, or about 50 cents per month.⁹

Offshore wind also will create jobs and economic growth for the state. The sooner Connecticut signals its commitment to offshore wind, the more likely the state will experience its economic benefits, particularly in terms of developing a regional hub for offshore wind staging in New London. Acadia Center estimates that generating 30% of our electricity from offshore wind could create about 4,000 jobs.¹⁰

² Synapse Energy Economics, *Understanding ISO New England's Operational Fuel Security Analysis*, May 2018, <http://www.synapse-energy.com/project/understanding-iso-new-englands-operational-fuel-security-analysis>. See also Synapse Energy Economics, *Working Toward a Clean, Reliable Electric Grid*, Feb. 2018, <http://www.synapse-energy.com/sites/default/files/Working-Toward-a-Clean-Reliable-Electric-Grid.pdf>.

³ U.S. ENERGY INFO. ADMIN., *Federal Leasing for Offshore Wind Grows*, (Dec. 2, 2016), <http://www.offshorewindhub.org/sites/default/files/resources/Federal%20leasing%20for%20offshore%20wind%20grows%20as%20first%20U.S.%20offshore%20wind%20farm%20comes%20online%20-%20Today%20in%20Energy%20-%20U.S.%20Energy%20Information%20Administration%20%28EIA%29%20.pdf> (hereinafter "Report").

⁴ U.S. Department of Energy National Renewable Energy Laboratory, *2016 Offshore Wind Energy Resource Assessment for the United States*, available at <https://www.nrel.gov/docs/fy16osti/66599.pdf>.

⁵ See Report, *supra* note 3.

⁶ Oceana, *Offshore Wind Would Produce Twice the Jobs and Energy as Offshore Drilling in Atlantic Ocean*, online at <http://oceana.org/press-center/press-releases/offshore-wind-would-produce-twice-jobs-and-energy-offshore-drilling>.

⁷ BUREAU OF OCEAN ENERGY MGMT., *Offshore Wind Energy*, <https://www.boem.gov/Offshore-Wind-Energy/> (last visited Oct. 12, 2017).

⁸ Jim Efstathiou, Bloomberg News, *First Big U.S. Offshore Wind Farm Offers \$1.4 Billion to Customers*, Aug. 1, 2018, available at <https://www.bloomberg.com/news/articles/2018-08-01/first-big-u-s-offshore-wind-offers-1-4-billion-to-customers>.

⁹ Alex Kuffner, Providence Journal, *National Grid Contract with Orsted Would Save Customers \$90 million over 20 Years*, <https://www.providencejournal.com/news/20190207/national-grid-contract-with-orsted-would-save-customers-90-million-over-20-years>.

¹⁰ Acadia Center, *Building a Stronger Connecticut*, online at <https://acadiacenter.org/document/building-a-stronger-connecticut-memorandum-to-the-next-governor/>.

Responsibly developed offshore wind is far more economical and environmentally responsible than offshore drilling. We must protect our coastline from offshore drilling, which has the potential to destroy fishing grounds, underwater habitats and marine wildlife.¹¹ The offshore drilling process threatens our state's tourism and natural resources. A study by Oceana report found in just 13 years, offshore wind could generate more energy than could be provided by all of the economically recoverable offshore oil and gas resources. In the next 20 years, offshore wind could create about 91,000 more jobs than offshore drilling (about double the job creation potential of offshore oil and gas). Offshore wind must be embraced (and offshore drilling rejected) as the future of clean energy in the region.

CFE applauds both the Energy & Technology Committee leadership and Governor Lamont for taking steps to demonstrate Connecticut's commitment to offshore wind procurement through both H.B. 7156 and S.B. 875.

CFE urges the Committee to adopt language to require that DEEP procure at least 2000 megawatts of offshore by 2030. Setting a timeline to deploy 2000 megawatts in line with our state renewable portfolio standard (RPS) and GHG-reduction mandates enacted in Public Act 18-50 and Public Act 18-82 last session will ensure that we can meet these targets, and that clean, renewable energy can replace the energy generated by Millstone when its first license expires in 2035.

Additionally, CFE recommends that the Committee include specific authority to coordinate these procurements with other states in the region (as proposed in S.B. 875), so that the state can benefit from economies of scale from larger procurements.

Finally, CFE recommends that the Committee include language ensuring that offshore wind procurements are implemented consistent with the highest environmental standards, and that the wind turbines are responsibly built and operated to protect against any negative impacts to ocean eco-systems or wildlife, including right whales and other marine animals. Offshore wind can and must be built responsibly with protective measures implemented during construction to keep marine life safe.¹²

Thank you for your time and consideration of this testimony.

Respectfully submitted,

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¹¹ Conservation Law Foundation, *Not on Our Watch: Protecting New England's Ocean From Offshore Drilling*, Jan. 4, 2018, online at <https://www.clf.org/blog/not-watch-protecting-new-englands-ocean-offshore-drilling/>.

¹² See e.g National Wildlife Federation, *Vineyard Wind, Conservation Groups Reach Historic Agreement to Protect Right Whales*, online at <https://www.nwf.org/Home/Latest-News/Press-Releases/2019/01-23-19-Right-Whale-Agreement>.